WHAT IS CLAIMED IS:

1. A method for evaluating at least one opaque defect on a mask substrate, the method comprising:

identifying an opaque defect based on a difference between its light reflection rate and a reference reflection rate;

determining a residue height of the opaque defect based on a light transmission rate; and

devising a repair formula based on the determined residue height for eliminating the opaque defect.

2. The method of claim 1 wherein the identifying further includes identifying the reference reflection rate by examining the light reflection rates of one or more normal opaque mask patterns.

3. The method of claim 1 wherein the identifying further includes imposing a light source over at least one predetermined pattern on the mask substrate and determining the light reflection rate thereof.

4. The method of claim 1 further comprising determining a co-relation between the light transmission rate and the residue height.

5. The method of claim 4 wherein the determining the residue height further includes:

imposing a light source over the opaque defect and obtaining its light transmission rate; and

identifying the residue height based on the light transmission rate and the

co-relation with the residue height.

6. The method of claim 1 further comprising etching the opaque defect using the devised repair formula.

7. A method for repairing an opaque defect on a mask substrate, the method comprising:

examining one or more opaque patterns in a predetermined area of the mask substrate;

identifying at least one opaque defect in the opaque patterns based on a difference between its light reflection rate and a reference reflection rate;

determining a residue height of the opaque defect based on its light transmission rate; and

devising a repair formula based on the determined residue height.

8. The method of claim 7 wherein the examining further includes:

imposing a light source over the opaque patterns on the mask substrate;

determining the light reflection rates thereof; and

determining a reference reflection rate.

9. The method of claim 7 further comprising determining a co-relation between the light transmission rate and the residue height for devising the repair formula.

10. The method of claim 9 wherein the determining the residue height further includes:

imposing a light source over the opaque defect and obtaining its light transmission rate; and

identifying the residue height based on the light transmission rate and the co-relation.

11. The method of claim 7 further comprising removing the opaque defect according to the devised repair formula.

12. The method of claim 11 wherein the removing further includes removing the opaque defect using an ion beam.

13. The method of claim 12 wherein the ion beam has an energy between 30 to 75 keV.

14. A method for repairing an opaque defect on a mask substrate, the system comprising:

examining one or more opaque patterns of the mask substrate;

imposing a light source over the opaque patterns;

determining light reflection rates of the opaque patterns;

identifying one or more normal opaque patterns based on the determined light reflection rates;

identifying a reference reflection rate based on the light reflection rates identified for the normal opaque patterns;

identifying at least one opaque defect in the opaque patterns based on a difference between its light reflection rate and the reference reflection rate;

determining a light transmission rate of the opaque defect;

determining a residue height of the opaque defect based on its light transmission rate; and

devising a repair formula based on the determined residue height.

15. The method of claim 14 further comprising determining a co-relation between the light transmission rate and the residue height for devising the repair formula.

16. The method of claim 15 wherein the determining a light transmission rate of the opaque defect further includes:

imposing an inspection light with a stable intensity over the opaque defect and measuring its light transmission rate; and

identifying the residue height based on the light transmission rate and the co-relation.

17. The method of claim 15 wherein co-relation is a linear co-relation.

18. The method of claim 14 further comprising removing the opaque defect according to the devised repair formula.

19. The method of claim 18 wherein the removing further includes removing the opaque defect with a focused ion beam.

20. The method of claim 19 wherein the focused ion beam is a Gallium ion beam with an energy level above 30 keV.